

SPRING LAKE

MAY 2015 - BIOASSESSMENT

Greetings Spring Lake Residents!

Please find the latest bioassessment of your lake below. The next scheduled inspection of your lake will be **July 7th, 2015**; weather permitting. Key highlights of this update include:

- Status of Submersed Aquatic Vegetation (SAV)
- Aquatic Plant of the Month- Factsheet Attached (may or may not be present in your waterbody)
- Eelgrass access corridor update- **Treatment scheduled for May 27th**
- Status of shoreline emergent vegetation
- Recommendations for you and your lake

Bioassessment:

On **May 6th, 2015**, Seminole County Lake Management staff, Thomas Calhoun, Joey Cordell, and Sophia Pengra, surveyed the aquatic plants in **Spring Lake**.

During this inspection, eelgrass was the only SAV observed. It was observed to a depth of 7 feet. This observation showed not only a reduction in the diversity of SAV but also an overall reduction in the dominant eelgrass. The next eelgrass corridor treatment is scheduled for May 27th; weather permitting. The invasive exotic hydrilla was not observed during this inspection. This species will continue to be monitored; however, no action is needed for hydrilla at this time.

Photo: Eelgrass (Native)



Native emergent vegetation (including pickerelweed, duck potato, fire flag, bur marigold, water hemlock, rush fuirena, iris, pennywort, bulrush, Carolina willow, fragrant water lily, yellow cow lily, and canna lily) continues to thrive with the reduction of torpedo grass. Invasive emergent vegetation found during the inspection included elephant ear, umbrella flatsedge, water primrose, Chinese tallow, Brazilian pepper, creeping oxeye, and torpedo grass. There are a handful of shorelines void of vegetation. It is recommended that these shorelines are planted with beneficial native vegetation. Native emergent vegetation plays an important part in the lake's ecosystem by filtering nutrients from runoff, protecting the shoreline from erosion, and providing habitat for aquatic species.

Photo: Pickerelweed (Native)



Photo: Canna lily (Native)



Photo: Bare shoreline



Photo: Shoreline with beneficial native vegetation (Pickerelweed, duck potato, and fragrant lily)



The water elevation during the time of the inspection was 62.88 feet above sea level. The secchi reading (measurement for water clarity) was 1.7 feet in a total depth of 7 feet, which was a decrease from the prior survey of 3.4 feet. No grass carp fish were observed during this inspection.

Recommendations for your lake:

- 1 Work together with other lakefront owners. Have *at least* one annual lake association meeting, invite guest speakers (such as county or state biologists) and discuss lake specific issues, especially nutrients/lake management recommendations. SCLMP staff would be glad to present our findings from this and other surveys. Continue to increase native aquatic plantings along the shoreline (such as pickerelweed, duck potato, and canna).

2 Consider increasing street sweeping services during times of peak leaf fall to ensure that this debris does not enter your waterways. Leaf debris contains phosphorous that can negatively impact your lakes.

3 Increase educational outreach programs i.e. Shoreline Restoration Workshops (planting days), Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs. Spread the word about reducing personal pollution through reducing total fertilizer use, using only phosphorous-free and slow release nitrogen fertilizers, keeping a functional shoreline with beneficial native aquatic plants, and keeping grass clippings out of your storm drains leading to the lake. All of these activities aid in protecting your waterbody! Contact Seminole County Lake Management Program (407) 665-2439 to find out about the free educational programs available to you.

4 Help spread the word! Obtain email addresses from neighbors not currently on the distribution list so that these reports can be shared with everyone. Valuable information is contained within these assessments.

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SEMINOLE COUNTY WATERSHED MANAGEMENT DIVISION Aquatic Plant of the Month

Eelgrass (*Vallisneria americana*): A Florida Native

Eelgrass, also known as tapegrass, is native to the state of Florida.

Identification

Eelgrass is a submersed, perennial plant that can be found throughout the state in both still and flowing waters. Eelgrass leaves often resemble tape or ribbon. They are about an inch wide with raised veins and rounded tips. The leaves can grow several feet in length and their upper parts can often be found floating along the water surface. Eelgrass produces both male and female flowers, however, the small, white female flowers are most often seen, as their long, corkscrew-like flower stalks reach the surface of the water.

Wildlife Value

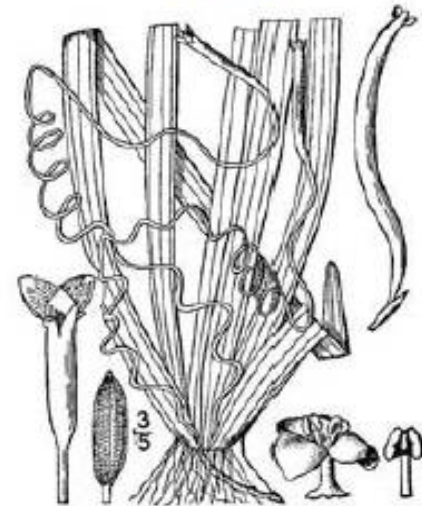
Eelgrass is an important food source for the endangered West Indian manatee (*Trichechus manatus*) and various species of waterfowl. Additionally, eelgrass provides important habitat, protection, and nursery grounds for fish.

Native submersed aquatic plants provide habitat for several micro- and macroinvertebrate species, which in turn provide a source of food for fish and other aquatic wildlife species including reptiles, amphibians, and waterfowl. Once aquatic plants die, their decomposing parts provide food (referred to as "detritus") for several aquatic invertebrates.

Additionally, native submersed plants play an important role in the aquatic ecosystem by reducing nutrients within the waterbody and by competing with invasive species for space.

Control

Although native, eelgrass may impede recreational access. For questions concerning control of eelgrass or to apply for a free aquatic plant removal permit, please contact your state agency, the Florida Fish and Wildlife Conservation Commission, online at: <http://myfwc.com/license/aquatic-plants> or by calling 407-858-6170.



Sources:

NOAA. (2012, October 22). *Eelgrass-Habitat of the Month*. Retrieved from <http://www.habitat.noaa.gov/about/habitat/eelgrass.html>

US/IFAS. (2014). *Eel-grass, tape-grass*. Retrieved from <http://plants.ifas.ufl.edu/node/465>

US/IFAS. (2014). *Algae*. Retrieved from <http://plants.ifas.ufl.edu/manage/why-manage-plants/algae>

Washington State Department of Ecology. (n.d.). *Vallisneria Americana*. Retrieved from <http://www.ecy.wa.gov/programs/wq/plants/plantid2/descriptions/vlame.html>